# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 0341 Sherman Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Right	3.36	03/22/2018 03/22/2018	Keith Millard

LM Start		Rating **	Α	Issue No.		13			
LM End		Issue Type +	Ма	Location *		N/A			
Category Earthen Levee				GPS La	atitud	e/Longitude			
				Start		End			
Item	Operations & Maintenance				0		0		
item	Manuals				0		٥		
DWR ID DWR_RD0341_01_f _ 2014_13									
		Comn	nent Cod	le					
		Inspecto	or Comm	nent					
District has	s the O+M	Manual on ha	and.						

No Photos

	1	D // ++							
LM Start		Rating **	Α	Issue No.		14			
LM End		Issue Type +	Ma	Location *		N/A			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Category		Start		End					
14	Emergency Supplies & Equipment				0		0		
item					0		0		
DWR ID DWR_RD0341_01_f _ 2014_14									
		Comn	nent Cod	de					
		Inspecto	or Comm	nent					
District has emergency supplies stored.									

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Right	3.36	03/22/2018 03/22/2018	Keith Millard

LM Start		Rating **	Α	Issue No.		15	
LM End		Issue Type +	Ма	Location *		N/A	
Category Earthen Levee				GPS La	atitud	de/Longitude	
Category				Start		End	
Item	Flood Pre	Flood Preparedness & Training			0		0
пеш					0		0
DWR ID	DWR_RD0	341_01_f _ 201	4_15				
		Comn	nent Coc	le			
		Inspect	or Comm	ent			
District is p	prepared for	or a flood fight					

No Photos

LM Start	0.00	Rating **	М	Issue No.		25	
LM End	0.00	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.08550	7 °	38.085507	0
пеш				-121.68652	3°	-121.686528	۰
DWR ID							

# Comment Code

#### Inspector Comment

FS\_ID:52252 DS\_ID:24215 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 05/05/2009 Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - O. Magana)

FIELD\_ŚTRUCT\_DESC: 30-inch steel drainage pipe through the levee, 11.1 feet below the crown. Corrugated metal cutoff wall around pipe at the center of the levee. Siphon breaker is located on both waterside (WS) and landside (LS). Pump is located on the LS approximately 300 feet from LS toe. Pipe is exposed on both levee slopes. Rock revetment present along WS slope. Marine Station number 1 located on WS with an attached small solar panel on top. [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual Unit No. 101, February 1962, (HLM 0.0). LMA encroachment station (STA) reference based on Map of Evacuation Route, Reclamation District 341 Sherman Island by Wagner Bonsignore Consulting Civil Engineers, A Corporation dated July 2012, STA 175+00].

### Photo 1 of 3: UCIP\_SP\_2018\_52252\_37640.jpg



Marine station posts in river identified as Station 1 near crossing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Right	3.36	03/22/2018 03/22/2018	Keith Millard

LM Start	0.00	Rating **	М	Issue No.		25 (cont)
LM End	0.00	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory		Start		End		
Item	DWR UC	IP LMA Respo	nsibility	38.08550	)7°	38.085507 °
пеш				-121.68652	28°	-121.686528 °
DWR ID						

# Comment Code Inspector Comment

FS\_ID:52252 DS\_ID:24215 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 05/05/2009 Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - O. Magana)

FIELD\_STRUCT\_DESC: 30-inch steel drainage pipe through the levee, 11.1 feet below the crown. Corrugated metal cutoff wall around pipe at the center of the levee. Siphon breaker is located on both waterside (WS) and landside (LS). Pump is located on the LS approximately 300 feet from LS toe. Pipe is exposed on both levee slopes. Rock revetment present along WS slope. Marine Station number 1 located on WS with an attached small solar panel on top. [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual Unit No. 101, February 1962, (HLM 0.0). LMA encroachment station (STA) reference based on Map of Evacuation Route, Reclamation District 341 Sherman Island by Wagner Bonsignore Consulting Civil Engineers, A Corporation dated July 2012, STA 175+00].

FS Date: 5/5/2009

LM Start	0.00	Rating **	М	Issue No.	25 (cont)
I M End	0.00	Issue Type +	Ma	Location *	



View of pipe and siphon breaker located on WS--dense vegetation on slope.

#### Photo 3 of 3: UCIP\_SP\_2018\_52252\_37642.jpg



Overview of LS slope above ground once it exits levee. Pump is located approximately 300 feet from levee toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Right	3.36	03/22/2018 03/22/2018	Keith Millard

LM Start	2.19	Rating **	M	Issue No.		21		
LM End	2.19	Issue Type +	Ma	Location *		WS		
Category	evee	GPS La	atitud	le/Longitude				
Calegory				Start		End		
Item	Encroach	ments		38.1131	44 °	38.113144°		
item				-121.687601 °		-121.687601 °		
DWR ID DWR_RD0341_01_s _ 2018_21								
		Comn	nent Cod	le				
TR : Tree	or limb							
		Inspecto	or Comm	nent				
Remove falen trree on waterside slope.								



Fallen tree on waterside slope should be removed.

LM Start	3.21	Rating **	М	Issue No.		22	
LM End	3.21	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Vegetation			38.1046	77°	38.104677 °	
пеш				-121.7000	30°	-121.700030 °	
DWR ID DWR_RD0341_01_f _ 2017_22							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Remove or thin wild vegetation at base of electrical transmission tower to allow visibility and access to slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 0341 Sherman Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	3.36	Rating **	A/W	Issue No.		36	
LM End	3.94	Issue Type +	Ма	Location *	LS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	38.105315°		38.098158°			
пеш					37 °	-121.706320°	
DWR ID DWR_RD0341_02_s _ 2017_36							
		Comn	nent Cod	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							
Weeds have been reduced to an acceptable level in this area.							



Acceptable landside vegetation.

LM Start	3.36	Rating **	M	Issue No.		40		
LM End	3.94	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetation			38.1053	15 °	38.098158°		
пеш				-121.7025	37°	-121.706320 °		
DWR ID	DWR_RD0	341_02_s _ 201	7_40					
	Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove the wild growth from the waterside slope.

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 0341 Sherman Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	3.48	Rating **	М	Issue No.		44	
LM End	3.48	Issue Type +	Ma	Location *		WS	
Catagoni Earthen Levee				GPS La	atitud	le/Longitude	
Category			Start		End		
Item	Encroach		38.1044	54°	38.104454 °		
пеш			-121.704275 °		-121.704275°		
DWR ID DWR_RD0341_02_s _ 2018_44							
		Comn	nent Cod	le			
TR : Tree	or limb						
Inspector Comment							
Remove tree limbs from waterside shoulder.							



Tree limbs on waterside shoulder should be removed.

LM Start	3.50	Rating **	М	Issue No.		45		
LM End	3.50	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Encroachments			38.10423	34 °	38.104234	۰	
пеш				-121.70442	27 °	-121.704427	0	
DWR ID	DWR_RD0	341_02_s _ 201	8_45					

Comment Code

TR : Tree or limb

#### Inspector Comment

Remove fallen tree from landside levee toe.

No Photos

LM Start	3.88	Rating **	М	Issue No.		46	
LM End	3.88	Issue Type +	Ма	Location *		WS	
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	Encroachments				38.099054 °	
пеш				-121.7063	68°	-121.706368 °	
DWR ID DWR_RD0341_02_s _ 2018_46							
		Comn	nent Coc	le			
TR : Tree or limb							
Inspector Comment							
Remove tr	ee and lim	bs from water	side sho	ulder.			



Tree trunk and limbs should be removed from waterside shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	3.94	Rating **	U	Issue No.		41		
LM End	6.14	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Vegetation			38.09815	8°	38.080223 °		
item			-121.706320°		-121.730312°			
DWR ID	DWR_RD0	341_02_s _ 201	7_41			·		
	Comment Code							

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove the unwanted vegetation from the waterside shoulder and slope.



Looking downstream from levee mile 3.94 at tall unwanted weeds and other vegetation on the waterside shoulder and slope.

LM End         6.03         Issue Type +         Ma         Location *         LS           Category         Earthen Levee         GPS Latitude/Longitude           Start         End           Vegetation         38.097782 °         38.080°						
Category         Start         End           Vegetation         38,097782°         38,080°						
Start         End           Vegetation         38,097782 °         38,080°						
Vegetation 38.097782 ° 38.080						
Item	43°					
-121.706262 ° -121.7283	30°					
DWR ID DWR_RD0341_02_f _ 2017_43						

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove the unwanted vegetation from the landside shoulder, slope and toe

## Photo 1 of 1: SP\_2018\_RD0341\_168\_43\_20180305\_00013.jpg



Remove the unwanted vegetation from the landside shoulder, slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	4.15	Rating **	М	Issue No.	7		
LM End	4.19	Issue Type +	Ma	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item		2015 USACE Erosion Survey,			48 °	38.094590 °	
пеш	DRAFT			-121.70636	67°	-121.706393 °	
DWR ID	DWR_RD0	341_02_s _ 201	6_7				
Comment Code							

#### Inspector Comment

2011 - Large new erosion pocket probably hidden by vegetation in the past. 2015: No observed changes. [2015 Site ID: SAC\_8-2\_L]



USACE 2013 Photo #1

4.47	Rating **	U	Issue No.		3
4.62	Issue Type +	Ма	Location *		WS
Supplemental			GPS Latitude/Longitude		
		Start		End	
	ACE Erosion S	Survey,	38.09062	20°	38.088572°
DRAFT		-121.70668	84 °	-121.707127°	
DWR_RD0	341_02_s _ 201	6_3			·
	4.62 Suppleme 2015 USA DRAFT	4.62 Issue Type + Supplemental  2015 USACE Erosion S DRAFT	4.62 Issue Type + Ma Supplemental 2015 USACE Erosion Survey,	4.62         Issue Type +         Ma         Location *           Supplemental         GPS La           Start         Start           2015 USACE Erosion Survey, DRAFT         38.09062           -121.70668	4.62 Issue Type + Ma Location *  Supplemental GPS Latitud Start  2015 USACE Erosion Survey, 38.090620 ° DRAFT -121.706684 °

# Comment Code

#### Inspector Comment

1999 - New small slump in eroded bank. 2005 - Reach extended because of vertical bank along the roadway upstream. 2011 - More slumping since last year. 2012 - Site upgraded to critical. Very steep slope which may be effecting the highway on top of the levee. 2015: New erosion towards downstream end of site. [2015 Site ID: SAC\_8-0\_L]

### Photo 1 of 1: SP\_2018\_RD0341\_168\_3\_20180305\_00002.jpg



USACE 2013 Photo #1

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	4.75	Rating **	A/W	Issue No.	42		
LM End	4.79	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS La	le/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.0866	41 °	38.086119°	
пеш				-121.7075	45 °	-121.707912°	
DWR ID	DWR_RD0	341_02_f _ 201	7_42				
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:65

Site Designation: DWR\_RD0341\_02\_s\_2012\_8

Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: hwy 160 forms levee crown road, erosion has encroached into paved crown, crown 38' wide. This site is currently under contract for repair under FSRP.

LM Start	4.75	Rating **	A/W	Issue No.	42 (cont)
LM End	4.79	Issue Type +	Ма	Location *	





Photo 2 of 3: SP\_2018\_RD0341\_168\_42\_20180305\_00011.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Reclamation District No. 0341 Sherman Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	4.75	Rating **	A/W	Issue No.	42 (cont)		
LM End	4.79	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.08664	۱1°	38.086119	0
пеш				-121.70754	۱5°	-121.707912	0
DWR ID	DWR_RD0	0341_02_f _ 2017_42					
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:65

Site Designation: DWR\_RD0341\_02\_s\_2012\_8

Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: hwy 160 forms levee crown road, erosion has encroached into paved crown, crown 38' wide. This site is currently under contract for

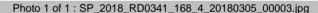
repair under FSRP



LM Start	4.76	Rating **	A/W	Issue No.	4			
LM End	4.85	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item		CE Erosion S	Survey,	38.0866	03°	38.085459°		
item	DRAFT			-121.7077	86°	-121.708607 °		
DWR ID DWR_RD0341_02_s _ 2016_4								
Comment Code								

#### Inspector Comment

2011 - Large slump section. 2012 - Site extended downstream, upgraded to critical, severe windwave. Slope is very steep and may be effecting the highway on top of the levee. 2015: No observed changes. [2015 Site ID: SAC\_7-9\_L] 11/02/17: This issue changed from U to A/W due to DWR 2017 Levee Eval Storm Site issue with U rating at same location.





USACE 2013 Photo #1

Rating A: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 0341 Sherman Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

LM Start	5.55	Rating **	М	Issue No.		11	
LM End	5.76	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		38.081270°		38.080807 °	
пеш				-121.7197	19702 ° -121.723488		
DWR ID	DWR_RD0	341_02_f _ 201	4_11				
		Comn	nent Cod	le			
T2 : Thin to	rees to allo	w visibility of	the grou	nd and roo	m to	flood fight.	
Inspector Comment							
Trim up the	Trim up the trees on the waterside slope so the ground can be seen.						

No Photos

	I					
LM Start	6.03	Rating **	U	Issue No.		49
LM End	6.10	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory						End
Item	Vegetatio	n		38.0801	43°	38.080125 °
пеш				-121.7283	32 °	-121.729662 °
DWR ID	R ID DWR_RD0341_02_f _ 2016_49					
Comment Code						

V2 : Remove the wild growth other than native grasses from the levee slopes.

# Inspector Comment

Remove the bamboo from the landside levee slope.

# Photo 1 of 1: SP\_2018\_RD0341\_168\_49\_20180305\_00015.jpg



RD 341 Landside slope from levee mile 6.03-6.10 tall unwanted growth of Arundo present on the levee section.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 0341 Sherman Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	6.28	03/22/2018 03/22/2018	Keith Millard

						_
LM Start	6.03	Rating **	U	Issue No.	1	
LM End	6.16	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2015 USACE Erosion Survey, DRAFT			38.0803	70°	38.080526°
				-121.728341 °		-121.730483 °
DWR ID	DWR_RD0341_02_s _ 2016_1					
Comment Code						
Inspector Comment						
2011 - Large slump at downstream end. Gully formed from surface						

2011 - Large slump at downstream end. Gully formed from surface runoff from the road. Shallow slumping throughout site. 2012 - The gully at upstream end has increased in size and site continues to worsen. 2015: No observed changes. [2015 Site ID: SAC\_7-3\_L]



USACE 2013 Photo #1